

Table 1: Rel A IOS L4 to RBR**IOS L4 to Design Requirement update using baseline 07-31-96****This table identifies the relationship between Level_4 and RBR****This table is for review purposes only.**

RBR ID	REQ KEY	REQ TYPE	RBR TEXT	REQ INTERP	L4 ID	REQ KEY	REQ TYPE	REL	L4 TEXT	CLARIFIC
IMS-0210#B	5003	security	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above		S-IOS-00050	2799	functional	A	Advertising accesses to data shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.	
IMS-0260#B	5050	functional	The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.							
IMS-0350#B	5074	security	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.							
IMS-0230#B	5017	security	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.							

IMS-0210#A	5481	security	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above							
IMS-0350#A	6477	security	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.							
IMS-0260#A	5486	functional	The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.							
IMS-0230#A	5483	security	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.							
IMS-0300#A	5488	functional	The IMS shall maintain a log of all information update activity.		S-IOS-00220	2831	functional	A	The ADSRV CI shall maintain a log of all information read, write, update and delete activity.	
IMS-0300#B	5062	functional	The IMS shall maintain a log of all information update activity.							

IMS-0250#A	5485	functional	The IMS shall provide required maintenance of the IMS data bases, to include at a minimum: a. Capability to restructure the data base b. Capability to interrupt a maintenance session and restart the session without loss of information		S-IOS-00330	2802	functional	A	The ADSRV CI shall support the interruption of any administrative or maintenance activity and its restart without loss of <u>database</u> information.	
IMS-0250#B	5042	functional	The IMS shall provide required maintenance of the IMS data bases, to include at a minimum: a. Capability to restructure the data base b. Capability to interrupt a maintenance session and restart the session without loss of information							
IMS-0210#A	5481	security	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above		S-IOS-00390	2833	functional	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data types.	
IMS-0230#A	5483	security	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.							

IMS-0350#A	6477	security	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.							
IMS-0260#A	5486	functional	The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.							
IMS-0210#B	5003	security	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above							
IMS-0350#B	5074	security	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.							
IMS-0260#B	5050	functional	The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.							

IMS-0230#B	5017	security	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.							
IMS-0210#B	5003	security	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above		S-IOS-00400	2834	functional	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data ownership.	
IMS-0350#B	5074	security	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.							
IMS-0260#B	5050	functional	The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.							
IMS-0230#B	5017	security	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.							

IMS-0210#A	5481	security	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above							
IMS-0230#A	5483	security	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.							
IMS-0350#A	6477	security	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.							
IMS-0260#A	5486	functional	The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.							
IMS-0010#A	6156	functional	The IMS shall be capable of providing 24 hour per day, 7 day per week access to the ECS services.		S-IOS-00480	9559	functional	A	The ADSRV CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.	
IMS-0010#B	4917	functional	The IMS shall be capable of providing 24 hour per day, 7 day per week access to the ECS services.							

IMS-0600#A	5517	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		S-IOS-00620	9179	functional	A B	The ADSRV CI shall support browsing Advertisements and linking to Data Dictionary definitions of terms.	
IMS-0600#B	5175	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.							
IMS-0600#A	5517	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		S-IOS-00630	9181	functional	A B	The ADSRV CI shall provide a capability to link advertising data to data dictionary definitions of terms.	
IMS-0600#B	5175	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.							
IMS-0670#B	5198	functional	The IMS shall provide the capability to accept, validate, and fill orders from users for periodic delivery of information stored at the IMS.		S-IOS-00670	9849	functional	A B	The ADSRV CI shall register the subscribable events with the subscription server.	
IMS-0670#B	5198	functional	The IMS shall provide the capability to accept, validate, and fill orders from users for periodic delivery of information stored at the IMS.		S-IOS-00680	9850	<u>functional</u>	A B	The ADSRV CI shall provide to the subscription service the universal references of the inserted, modified, or deleted advertisement, so that the user can use this to retrieve the affected advertisement.	

IMS-0600#B	5175	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		S-IOS-00690	9599	functional	A B	The ADSRV CI shall accept Search Requests in a format compatible with the Earth Science Query Language.	
IMS-0630#B	5184	functional	The IMS shall provide the capability to select metadata for retrieval by: a. Boolean operators b. Relational operators c. Attribute values d. Search strings e. Combinations thereof							
IMS-0650#B	5188	functional	The IMS shall query non-geographic metadata by any of the following criteria at a minimum: a. Exact word match b. Phrase match c. Character set (string) d. Wildcard construct (prefix, embedded, suffix) e. Character range f. Logical and Boolean operators g. Min/max range search h. Any combination of the above							
IMS-0600#A	5517	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.							
IMS-0600#A	5517	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		S-IOS-00710	9183	functional	A B	The ADSRV CI shall accept Subscription Requests as defined in Appendix A of the current version of 304-CD-002.	

IMS-0600#B	5175	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.							
IMS-0600#A	5517	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		S-IOS-00720	9131	functional	A	The ADSRV CI shall accept Advertisements as defined in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.	
IMS-0600#B	5175	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.							
IMS-0600#B	5175	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		S-IOS-00760	9184	functional	A B	The ADSRV CI shall provide Notifications in response to Subscription Events.	
IMS-0600#A	5517	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.							
IMS-0600#B	5175	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		S-IOS-00780	4913	functional	A	The ADSRV CI shall contain <u>shall have</u> advertisements that describe all EOSDIS science data sets available for distribution to users.	

IMS-0600#A	5517	interface	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.							
V0-0370#A	3119	interface	The DAAC(s) shall have the capability to send and ECS shall have the capability to receive Advertising Information [implementation issue 6].		S-IOS-00820	2817	interface	A	The ADSRV shall have the capability to receive V0 Advertising Information from the DAAC(s).	<u>The ADSRV will receive the Advertising information in HTML format as stated in IOS-870.</u>
V0-0370#B	3120	interface	The DAAC(s) shall have the capability to send and ECS shall have the capability to receive Advertising Information [implementation issue 6].							
NOAA0110#C	2104	interface	The ECS shall have the capability to send and the SAAs shall have the capability to receive advertising information.		S-IOS-00830	2818	interface	A	The ADSRV shall have the capability to send Advertising information to the NOAA SAAs.	

IMS-0380#A	5496	interface	The IMS shall provide the capability to exchange directory data with IP data centers, ADCs, and selected ODCs.	A: Need one-way interoperability with NOAA-SAA. For TRMM support end-to-end testing and fault isolation.	S-IOS-00840	2819	interface	A	The ADSRV shall have the capability to receive Advertising information from the NOAA SAAs.	<u>The ADSRV will receive the Advertising information in HTML format as stated in IOS-870.</u>
IMS-0380#B	5085	interface	The IMS shall provide the capability to exchange directory data with IP data centers, ADCs, and selected ODCs.	B: ASTER GDS interfaces to EDC DAAC only.						
NOAA0800#B	2169	interface	The NOAA Data Centers shall have the capability to send and the ECS shall have the capability to receive advertising information.		S-IOS-00850	2820	interface	A	The ADSRV shall have the capability to receive Advertising information from the NOAA Data Centers.	<u>The ADSRV will receive the Advertising information in HTML format as stated in IOS-870.</u>

IMS-0320#A	5489	functional	<p>Standard Product related metadata shall contain, at a minimum:</p> <ul style="list-style-type: none"> a. Keywords and glossary from investigators b. Keywords, synonyms, and glossary for cross-product and cross-directory referencing c. Identifiers for locating products in the DADS archive by granule d. Documentation on algorithms, including version history, authors, written description of product, equations, and references e. Documentation on instrument(s) and spacecraft(s) including history of housekeeping and ancillary parameters, discipline characterization, calibration parameters, key individuals, and references f. Identifiers, algorithms, written descriptions, equations, authors, and references associated with static browse products and subsetted, subsampled, and summary data products g. Published papers, research results, significant results, and references by author and date h. Key organizations and personnel for all product-related DAACs, ADCs, and ODCs i. Granule-specific information as listed in Tables C-10 and C-11 in Appendix C 		S-IOS-00860	4912	functional	A	The ADSRV CI shall contain <u>have the capability to</u> contain advertisements that include key organizations and personnel for all product-related DAACs, ADCs, and ODCs.	
------------	------	------------	--	--	-------------	------	------------	---	--	--

IMS-0320#B	5063	functional	<p>Standard Product related metadata shall contain, at a minimum:</p> <ul style="list-style-type: none">a. Keywords and glossary from investigatorsb. Keywords, synonyms, and glossary for cross-product and cross-directory referencingc. Identifiers for locating products in the DADS archive by granuled. Documentation on algorithms, including version history, authors, written description of product, equations, and referencese. Documentation on instrument(s) and spacecraft(s) including history of housekeeping and ancillary parameters, discipline characterization, calibration parameters, key individuals, and referencesf. Identifiers, algorithms, written descriptions, equations, authors, and references associated with static browse products and subsetted, subsampled, and summary data productsg. Published papers, research results, significant results, and references by author and dateh. Key organizations and personnel for all product-related DAACs, ADCs, and ODCsi. Granule-specific information as listed in Tables C-10 and C-11 in Appendix C							
------------	------	------------	--	--	--	--	--	--	--	--

IMS-0360#A	5495	interface	The IMS shall maintain or provide access to an on-line Earth Science master directory of information, which may be geographically distributed, that describes whole data sets in the Earth science disciplines.		S-IOS-00870	4914	standards	A	The ADSRV CI shall support submission of advertisements in <TBD> format <u>HTML 2.0 format containing additional Advertising tags.</u>	
IMS-0360#B	5084	interface	The IMS shall maintain or provide access to an on-line Earth Science master directory of information, which may be geographically distributed, that describes whole data sets in the Earth science disciplines.							